

music; under these circumstances they can accommodate thousands with ease on the floor of a church of almost any form, while we are debarred from meeting together to a greater extent than 1,000 or 1,200, unless we adopt galleries or some other form of edifice.

These premises being granted, we come at once to the architectural question. Can an edifice be erected, adapted to the Protestant forms of worship, which shall accommodate a greater number, and be at the same time a dignified and solemn temple, worthy of the purpose to which it is dedicated?

Mr. Pugin of course will answer, There is but one form, that of the mediæval church; all the rest must be wrong. My belief is, that it is just as easy to erect a beautiful and solemn Protestant church, as it is to erect a Roman Catholic one. What men did once they may do again. The mediæval church was the invention of rude men, under very unfavourable circumstances. Their descendants may surely do as well under far more kindly influences; or, to take a wider view of the matter, there is no nation in the earth, from the earliest dawn of Egyptian civilization to the present time, or from the farthest east to the most distant west, who have not been able to devise and erect appropriate, beautiful, and solemn places of worship for themselves, and there can be no argument *a priori* why we should not do the same thing. It is true we have not hitherto done so, because in the last century we were careless of architectural ornament in churches, as we were in our houses and civic edifices; and now that we have turned our attention to the subject, instead of following the process which enabled our forefathers and all other nations of the world to erect such beautiful and appropriate temples for their worship, we have listened to the false teaching of those who have set up a servile doctrine of copying, in opposition to an honest and purpose-like endeavour to do the best our intellects would admit of to express the religious feelings with which the nation is instinct and as much in earnest as any nation of the earth.

Except size, there is no one element of beauty at the command of the Roman Catholic artist which is not also available for the Protestant. He may build his church of precious marbles, enrich every detail, cover every part with sculpture and ornament, lavish every resource of art in every part, and as easily spend 100,000*l.* or a million upon it as a few thousands. In one point only is he trammelled. The superficial measure of the part appropriated to the service must not exceed 7,000 or 8,000 feet. Size, however, is the vulgarst of all the elements of beauty; and this is amply sufficient, when well employed, for all the purposes of art.

One of Mr. Pugin's favourite sneers, which he has repeated ever since he wrote on this subject, is the easy convertibility of Protestant churches to coach-houses, &c. He knows, of course, that there is no edifice, however noble, that may not be converted to other uses, however base. But what are the facts of the case? There is scarcely a town in Catholic France where splendid Pointed edifices have not, within the limits of the present generation, been desecrated, and applied to the most ignoble purposes. In Protestant England I know of no single instance of such barbarity. On the contrary, we have been the most religious preservers of mediæval edifices, and were the first to appreciate and admire their beauties; unfortunately, also, the first to copy their forms. If I could condescend to it, does Mr. Pugin fancy I could not sneer as sarcastically at his productions as he does at ours?

In this letter, as elsewhere, Mr. Pugin strongly insists on the truthfulness of his architecture. That he is the most truthful of copyists I fully admit; but, according to my definition, truth in art consists in representing faithfully the wants and feelings of the people who use it, and of the age which gave birth to it.

No one sees more clearly, and has exposed more powerfully, the absurdity of Gothic castles and villas, and such like edifices, than Mr. Pugin; and it seems strange that he should not be able to perceive that in a religious, as well as in a social point of view, the priest or citizen of the nineteenth century differs from those of the thirteenth or fourteenth as essentially as the baron and serf of those days do from their descendants at pre-

sent. Neither the lord mayor's man in armour, nor the gentlemen who figured in the Eglinton tournament were mediæval knights, though looking so like them. Nor are Mr. Pugin's churches mediæval, though so truthfully disguised. The spirit is entirely changed in both cases, and the bodily resemblance is a mere mockery and untruth which nothing can get over or conceal. It does not represent either the feelings of the age or of the people, and only amuses a few amateurs of mediæval antiquities, who in every other feeling or relation of life show how little sympathy they have with such masquerading.

With these opinions I cannot feel the bitterness of the reproach which was to annihilate by telling me I have no sympathy with the symbolism of modern mediæval churches. When I entered St. George's, Southwark, the other day, the roof, so far from representing heaven to my mind, was symbolical only of bad carpentry. A few gilt stars on a blue ground of painted deal, and two or three badly-carved wooden angels nailed to the end of the beams, representing heaven and its hosts, might be tolerated, though with pity, in the dark ages, and respected in New Zealand or the Sandwich Islands, but in the nineteenth century such carpentry sublimity appears to me but a sorry substitute for a purer and elevated conception of God and his works; and I am not ashamed to confess, that in this, Mr. Pugin's ideas and mine are wide apart as the poles, and I trust they may never approximate nearer to one another, from my side at least.

JAMES FERGUSSON.

ARRANGEMENTS TO PREVENT EXPLOSIONS IN POWDER MILLS.

AT the coroner's inquest upon the unfortunate victims of the recent explosion at Hounslow, one of the witnesses (a practical man engaged upon the works), in his evidence stated, that in the house where the first explosion occurred, it was necessary to roll the tanks of powder over the floor, which was always unavoidably strewn with loose powder; and further, that this was a most dangerous operation, and the probable cause of the accident. Now, of the danger there can be no doubt, but I think by the adoption of either of the two following methods this danger may be (in a great measure) removed.

The first is to provide a portable tram-way, made of elm or other fitting wood, and the parts of which should be fastened together with copper screws, and well-covered with leather, particularly the rails, which should be of a sufficient height to keep the barrel quite independent of contact except where touching the rails: upon these rails the barrel would roll evenly, violent confussions would be avoided, all contact with loose powder upon the floor removed, and even should powder be strewn accidentally upon the rails, the surface of contact in the barrel being so materially reduced, the chances, or rather probabilities, of an accident must also be reduced in the same proportion. This tramway may be made in any convenient lengths, and laid down in a few minutes. When not in use it should be taken up, and kept in a place as free as possible from grit or dust of any description; thus it would be kept clean, and the leather preserved from the action of the saltpetre.

The other suggestion is,—could not a trap be left in the roof, and outside the house any simple machinery constructed, the running gear of which should be of leather or twisted gut, and the barrels be lowered thence through the roof; and, to avoid concussion when alighting inside the house, a leathern cushion (stuffed with leathern fibre, or any other unflammable material), should be provided. This latter suggestion is open to several objections, but the principal one I think is the breaking of the gear, and the consequent falling of the barrel.

BROWLEY.

PROPOSED NEW PARK FOR FINSDURY.—A committee has been formed to carry out this project. An area of 300 acres of vacant ground, costing about 150,000*l.*, has been pointed out by Mr. Lloyd, the projector, as an eligible site.

THE TONE OF ARCHITECTURAL WRITERS.

I AM a lover of architecture, and have been a diligent reader of works relating to art, and especially to architecture. My object in seeking instruction in books has been to endeavour to discover the principles upon which architecture is said to be based—I mean the scientific principles, such as those which in chemical and physical science serve to unite scientific men into a vast and harmonious community; presenting, as they do, a grand domain of neutral ground, upon which no quarrels are permitted, upon which all disputes are settled, and all points of disagreement adjusted. This neutral ground has been won for science by such men as Galileo, Newton, Davy, and a galaxy of similar splendid lights which have adorned our intellectual armament, ancient and modern.

But in art, especially in architecture, there is no such neutral ground whereon artists may meet as brothers and friends, to test the merits of their respective works, and settle points of difference by reference to principles. And yet art has had its Galileos and its Newtons, whose works remain to instruct and benefit mankind; although the principles upon which they are constructed seem never to have been properly reduced to writing.

When a scientific man of ordinary ability sits down to write a treatise on chemical or physical science, he can scarcely fail to instruct his readers, and win the assent of scientific men themselves, provided he take only common industry and good sense as his guide: that is, if he carefully peruse the larger treatises and memoirs which have been written on the subject of his book, he is most likely to produce a true, if not a new work.

But in the fine arts, a man of extraordinary talent, attempting to write a treatise on any department, especially architecture, seems to be thrown almost entirely on his own resources; he has to navigate a ship without compass or rudder; he is at the mercy of the winds and waves of his own imagination, and hence can scarcely fail to be wrecked.

Surely this would not be so if writers entered upon their undertakings with the single purpose of discovering truth; if they were actuated by a real love of scientific principles, they would work harmoniously together, and endeavour to establish for art and its professors that neutral ground whereon all might meet in harmony.

Sad, indeed, is the task, to him who is impressed with a feeling of love and admiration for the pure, the beautiful, and the true in nature and in art, to wade through the treatises which from time to time appear on the different departments of art. Sadder still is it to hear the tone in which architects and artists speak of each other. In their books they write such words as "trash," "rubbish," "nonsense," and "folly;" in their speech they apply such terms to each other as "dolt," "ass," "ignoramus," and "hungler."

Mr. Garbett, in his "Principles of Design in Architecture," has not avoided this error. The author is evidently in earnest, and some of his reasoning is both new and true. But I must strongly protest against the tone of the book: it is alike injurious to the author and to the art whose principles he seeks to expound. Men who would otherwise gladly listen to him will be offended by his tone; they cannot co-operate with such a teacher in raising the dignity of art, and working towards that desirable end—the harmony of brother-professors in one common pursuit. Sure I am that art contains within itself the broad truths of science, and equally sure I am that their broad truths will never be solved until artists become—like scientific men—eager only for the discovery of truth.

In page 10, he speaks of a "great property benefiting none but its owner," just as if that were possible. Page 11, he speaks of "a people living surrounded and immersed in objects of bad taste, or in objects of good taste,—a people whose works are all utilitarian, and one whose works are all artistic." Of this it may be remarked that the one condition is about as impossible as the other: for in the palmiest days of Greece the people lived in rude huts, and the Grecian ladies had not the comforts and conveniences of one of our cottagers' wives. Page 28, Londoners are spoken of as being "utterly deadened to this